

IN THE CLAIMS

1. (Currently Amended) A method of forming and producing one or two thickenings (18, 18') along each longitudinal edge (2a, 2b) of an advanced or running material [(2)], using the steps of folding along at least one folding line (2a', 2b'), an edge related portion (2e, 2d) towards a centre [(2')] of said material [(2)], said centre [(2')]] is oriented in an advanced direction (E), causing an abutment or contact with a corresponding surface of the material [(2)], whereby said edge related portion (2e, 2d) and said corresponding surface are bent and/or rolled in a bending or rolling sequence and in a direction of advancement, characterised in

a. choosing a thickness of a running material [(2)] between 15 and 100  $\mu\text{m}$  and choosing as said material [(2)] a plastic film material,

b. folding edge related plastic film portions (2e, 2d), according to "a", towards a corresponding surface to form a fold with a folding line [(2a')], whereby an inner surface [(2c')] of an edge related film portion [(2c)] is in abutment with a corresponding upper surface of the film material to form a two-ply edge film portion.

c. rolling said two-ply edge film portion, according to "b", to form a loop, oriented in a direction of advancement (E) and

d. welding loop related sections together to close or seal said loop, servable as a retainer means.

2. (Currently Amended) A method according to claim 1, wherein characterised in that said two-ply edge film portion is folded to form a four-ply edge film portion before a rolling sequence, according to "c" and welding according to "d".

3. (Currently Amended) A method according to claim 1 [(or 2)], wherein characterised in that a heat welding, according to "d" is concentrated to a surface section oriented between an edge, related to said plastic film material, and said

folding line.

4. (Currently Amended) A method according to claim 1 [[or 2]], wherein characterised in that an increasing number of used folding lines is dependent of a decreasing thickness of the plastic film material.

5. (Currently Amended) A method according to claim 4, wherein characterised in that said number of folding lines is chosen to two or three.

6. (Currently Amended) A method according to claim 1 [[or 4]], wherein characterised in that the thickness of the plastic film material is chosen between 50-80  $\mu\text{m}$ .

7. (Currently Amended) A method according to claim 1 [[or 2]], wherein characterised in that the rolling of said edge related plastic film material portion, according to "c", is caused by using a, cylinder related, arched-formed surface.

8. (Currently Amended) A method according to claim 1, wherein characterised in that the film material, according to "a", is of a chosen plastic material, and displays a temperature during said bending or rolling sequence, by which the plastic material displays adhesive properties, whereby an edge, related to said plastic material, adjacent said folding line adheres to each other during the forming of said loop.

9. (Currently Amended) A method of forming and producing one or more thickenings along each longitudinal edge portions of an advanced or running thermoplastic film material [[(2)]] towards an intermediate portion and sealing said edge portions to said intermediate portion using a first folding apparatus [[(4)]], adapted to fold and bring said edge portions to an abutment or contact with a surface of the plastic film material related to said intermediate portion, according to any of the preceding claim[[s]] 1 [[to 8]], wherein characterised in that a folding of said foldable

edge portions is caused by a second folding apparatus [[(6)]], adapted to fold and bring said foldable edge portions to an abutment or contact with a surface of the folded edge portions caused by said first folding apparatus and sealing said doubled folded edge portions.

10. (Currently Amended) A method of producing a continuous edge thickening [[(18)]] along a running direction of a web [[(2)]] of a positively and continuously transported thermoplastic film material as stated in claim 9, wherein characterised in that the web material [[(2)]] is initially folded through 180° at least once along its outer edge region running in the running direction; that, after such folding, said web [[(2)]] is, for the fixing of each respective fold, displaced an angle around a roller or cylinder; that each respective folded area is passed through a welding device in order to provide a unifying weld between the fold/folds and the remainder of the web [[(2)]]; that, utilising the residual heat stored in the fused and welded material, each respective folded and welded edge of the web, in its tensioned state, is moved around rollers (9-11), with progressively reducing available roller width and with ramp formations at each respective outer edge, the folded and welded edge is plastically deformed to a loop having circular or semicircular outer cross section.

11. (Currently Amended) A method as claimed in claim 1 [[or 8]], wherein characterised in that a double edge folding is applied to said thermoplastic film material, with a thickness of up to 80 µm, which single edge folding is applied to thicker film materials.

12. (Currently Amended) A method as claimed in claim 1, ~~2 or 11~~, wherein characterised in that in the welding operation, according to "d", welding jaws [[(14)]], linearly reciprocal towards and away from the film, are employed as thermo-

tolerant belts [[(15)]], located along the jaws and located in the longitudinal direction of the film between the jaws and the film, are moved at a speed which is equal to that of the thermoplastic web [[(2)]].

13. (Currently Amended) A method as claimed in claim 1, ~~2 or 11~~, characterised in that the welding, according to "d", is executed centrally above each respective fold.

14. (Currently Amended) An arrangement for forming and producing one or two thickenings along each longitudinal edge of an advanced or running film material using the steps of folding, along a folding line, an edge related film portion towards a centre of the film material, said centre is oriented in the advanced direction, causing an abutment or contact with a corresponding surface of the film material, wherein characterised in;

a. choosing a thickness of said running material [[(2)]] between 15 and 100 µm and choosing as said material [[(2)]] a plastic film material,

b. means for folding edge related plastic film portions ~~(2e, 2d)~~, according to "a", towards a corresponding surface to form a fold with a folding line [[(2a')]], whereby an inner surface [[(2c')]] of an edge related film portion [[(2c)]] is in abutment with a corresponding upper surface of the film material to form a two-ply edge film portion.

c. means for rolling said two-ply edge film portion, according to "b", to form a loop, oriented in a direction of advancement (E) and

d. means or apparatus for welding loop related sections together to close or seal said loop, servable as a retainer means.

15. (Currently Amended) An arrangement according to claim 14, wherein characterised in that a heat welding apparatus is concentrated to a surface section,

oriented between an edge related to said film material and said folding line.

16. (Currently Amended) An arrangement according to claim 14 [[or 15]], wherein characterised in that the thickness of the film material is chosen between 15 and 100  $\mu\text{m}$ , preferably between 50 - 80  $\mu\text{m}$ .

17. (Currently Amended) An arrangement according to claim 14 wherein characterised in that the means for rolling said edge related film material portion and said corresponding surface is caused by a cylinder related arcuate surface.

18. (Currently Amended) An arrangement according to claim 14, wherein characterised in that the film material is chosen as a plastic material and exposing a temperature during said rolling sequence by which the material exposes adhesive property, whereby an edge, related to said film material, and said folding line adheres to each other to form said loop.

19. (Currently Amended) An arrangement for forming and producing longitudinal edge portions of an advanced or running thermoplastic web or film material [[(2)]] towards an intermediate portion and sealing said edge portions to said intermediate portion using a first folding apparatus [[(4)]] adapted to fold and bring said edge portions to an abutment or contact with a surface of the film related to said intermediate portion, according to any of claims 14 [[to 18]], wherein characterised in that a folding of said foldable edge portions is caused by a second folding apparatus [[(6)]], adapted to fold and to bring said foldable edge portions to an abutment or contact with a surface of the folded edge portions caused by said first folding apparatus and sealing said doubled folded edge portions.

20. (Currently Amended) An arrangement for forming and producing at least one continuous edge thickening [[(18)]] along the running direction of a film material [[(2)]] of a positively and continuously transported thermoplastic film

material, wherein characterised in that it includes, a) at least one fold and/or guide rail (4, 6) per edge thickening, in order, during the initial folding of the edge of the film material [[(2)]] transversely of the running direction at 90°, to define the width thereof on its continued transport in the longitudinal direction at an amount corresponding to the size of the inward fold, the fold and/or guide rails (4, 6) being designed, during the transport of the film material [[(2)]], to further fold in the film material to a total of 180° to an area of the film material located inside the fold under the formation of a single or double-folded portion per side of the web material [[(2)]], b) a welding device [[(13)]] for mutually fusing and welding together the fold material portions and these adjacent portions of the film material [[(2)]] and c) edge seaming or folding rollers (9, 11) disposed subsequently in the running direction which display progressively reducing available roller width and are provided with ramp formations at each respective outer edge in order that these, under the utilisation of residual heat, which remains in the thermoplastic film material after the welding operation as a result of roller deformation of the welded edge portions, shall form edge thickenings of circular or semicircular outer cross section.

21. (Currently Amended) An arrangement as claimed in claim 20, wherein characterised in that the fold and/or guide rails (4, 6) include, in the running direction of the thermoplastic film material, an initially somewhat downwardly and outwardly bent portion in relation to the film material, but thereafter only include flat element pieces coplanar with the film and its folds, at the same time as each respective fold and/or guide rail (4, 6), finally in the transport direction of the film material, displays two flat elements coplanar with the film with a bend of 180° in relation to the flat element pieces.

22. (Currently Amended) An arrangement as claimed in any of claim[[s]]

20 [[or 21]], wherein characterised in that means for fusing and welding together of the folded portions with the rest of the film material include heated jaws [[(14)]] disposed on either side of the film and which are positively displaceable to and away from the film material [[(2)]] separated therefrom by thermo-tolerant endless belts [[(15)]] disposed on rollers and whose speed in operation is controlled to correspond to that of the thermoplastic film material [[(2)]].

23. (Currently Amended) An arrangement as claimed in claim[[s]] 14 [[to 22]], wherein characterised in that a hot air unit [[(12)]] is disposed in immediate association to and immediately before the first edge seaming or folding roller [[(11)]].

24. (Currently Amended) A film material formed by a method according to any of the preceding claim[[s]] 1 [[to 13]].

25. (New) A film material having edge related thickenings in the form of loops.